RD74010991

Ups Installation Instructions
For
TS2000

Prepared by:
TransScan Medical Ltd.
Industrial Zone, PO Box 786
Migdal HaEmek 10550,
Israel

	Name	Signature	Date
Prepared	D. Alkopher		
Checked	S. Steinberg		
Approved	Y. Wimisner		
Quality Assurance	O. Peri		

Table of content

1) Table of Figures Page: 2
2) Required Parts Page: 3
3) Procedure Page: 3
4) Setting the I/O card Page: 4
5) UPS Connection Page: 4
6) Bios Setup Page: 5
7) UPS Setup Page: 6
8) Modem Setup Page: 6
9) Checking the UPS Page: 7
10) Troubleshooting Page: 7
11) Installation Check List Page: 8

1) Table of Fig.

Fig. 1-page: 9
Fig. 2-page 9
Fig.3-page: 10
Fig.4-page: 10
Fig.5-page: 11
Fig.6-page: 12
Fig.7-page: 12
Fig.8-page: 13
Fig.9-page: 13
Fig.10-page: 14
Fig.11-page: 14
Fig.12-page: 15
Fig.13-page: 15
Fig.14-page: 15
Fig.15-page: 17

1)Introduction

The need for installing a UPS in a TS2000 system arose from the situation that the power supply in hospitals and clinics is some time unstable and therefore may cause problems for the system.

The UPS, which is installed, regulates the power to the system and in case of power failed will shut down the system properly.

2)REQUIRED PARTS

1) UPS – Part no. 1156526RVB75 for 230V or 1156533RVB75 for 115V, which includes: UPS, 3 Electrical cables, Control cable (red), Telephone cable, Software CD.
2) UPS U/G kit TransScan P/N AY74010992 or Siemens P/N 4781733 RVB75 which includes:

Front Panel for UPS + Holders & Screws. (See Fig. 7)

Bracket for UPS & Screws. (See fig. 8)

Drilling Plate. (See fig. 10)

Clamp.

Set of Drills, (sizes: 7mm, 35mm).

Marking Tool.

Note: A drilling machine will be supplied locally.

Applied Document: TS2000 Service Manual.

3)PROCEDURE

1) Shut down system, switch off the main switch and disconnect the system from the mains.
2) Disconnect the printer and remove the printer from the lower shelf.
3) Remove the two drawers from the cart.
4) Remove the two slide of the bottom drawer.
5) Drill a hole, (at least 35mm Dia.) back of the shelf. (See Fig. 11&13)

6) Attach the drilling plate to the bottom of the shelf and secure it in with the clamp. (See Fig.11)
7) Drill 4 holes Ø7mm Dia. According to the drilling plate.
8) Release the drilling plate and attach it to the upper side of the shelf (see Fig.12)
9) Mark two holes about Ø3mm Dia. On both sidewalls (Where the slides where connected), using the drilling plate. (See Fig. 12)
10) Screw in the front panel holders to the sidewalls. (See fig. 9)

4)SETTING THE I/O CARD

(The setting of the I/O card has to be changed)

1) Follow paragraph 5.4 of the service Manual.
2) In step 4, the setting should be:

COM 3, IRQ5,

Move JP1 to IRQ5,

Move JP2 to COM 3 by moving jumper to the outer position. (see table on card).

(See Fig. 14)

3) Return card to computer, return the computer ins ide the TSP, put the TSP back inside the cart and connect all the cables, Leave the PSB open.

5)UPS CONNECTION

(See fig.1 –block diagram for 230V)

(See fig. 2 -block diagram for 115V)

NOTE: The UPS is connected between the PDB (Power Distribution Box) and the TSP. (See Fig.1 or 2). The printer is connected directly to the PDB and not to the UPS.

1) Disconnect and remove the electrical cable between the TSP and the PDB. (The PDB is located behind the modem drawer.)
2) Put the UPS in its place.
3) Connect a new cable between the output of the UPS and the TSP input. (See fig. 3)
4) Connect an electrical cable between the PDB and the UPS input. (See fig. 3)
5) Connect one side of the control cable to the backside of the UPS. (See fig. 3)
6) Pass the other side of the control cable through the hole at the back of the shelf.
7) Move the cable up to the TSP, (next to the printer data cable).
8) Connect the control cable to the empty 9 pin-type connector. (See Fig. 4)

9) Make sure cables are connected, close PSB and insert the probes.

10) Position the UPS in place; secure the UPS bracket to the shelf with 4 screws, close the front panel and put back the upper drawer.

11) Put back the printer in its place and connect its cables.

12) Connect the system to the main power; switch on the main switch.

13) Remove the plastic which protects the On switch

14) Press and hold the UPS "ON" button for 5-15 seconds.

15) The green lamp will lit, than the orange lamp will lit for a while and than the green lamp will stay on. (See Fig. 5)

6)BIOS SET UP

1) Switch the system on.

2) When system starts, press "DEL" to enter BIOS Set-Up.

3) In the "Integrated Peripheral Menu", set "Serial port 2" to be 2F8/IRQ3.

4) In the PNC/PCI configuration, change the "recourses control by", from Auto to manual.

5) In the line of IRQ5 change to Legacy ISA.

6) Press "Esc" to exit Set-up; press F10, "Y" or "Z" (in the German keyboard) and " Enter", to save the set-up.

7) When system gets to the "Welcome" screen click "Exit" and "Exit To Windows".

8)Click "Start/ Setting /Control Panel'

9) Double click on "Ports"

10) The setting for COM2 should be:

BAUD rate – 9600

Click "Advanced"

BASE I/O – 2F8

IRQ – 3

Select "Don't restart now"

The setting for COM 3 should be:

BAUD Rate – 57600

Click "Advanced

BASE I/O – 3E8

IRQ – 5

Select “Restart now”

11) After system restarts, exit again to Windows screen, for UPS & Modem Setting.

7)UPS SETUP

1) When system gets to the “Welcome” screen click ”Exit” and “Exit To Windows”.

2) Select START, SETTING, and CONTROL PANEL.

3) Double click on UPS. (See Fig. 15)

4) Click on RADIO button “Uninterruptible power” and select “COM 2”.

5) Click on the following Radio button, in the UPS configuration And “Power failure signal only.

6) UPS interface voltage:

Negative - in the first line “Negative” - in the third line “Positive”

7) Leave all the other settings.

8)Click OK, Yes and wait for communication test between UPS and computer to complete.

9) Exit to Windows.

8)MODEM SETUP

Note: Before setting the Modem, the PC Anywhere must be closed.

1) Repeat step 7 in Para.6

2) Double click on “Modems”.

3) Select the existing Modem & click remove.

4) Note :If a Modem was not installed go to step 48

5) Click “Yes”.

6) Click “Add”, “Next”, wait “Next”, “Finish”, “Close”.

7) Exit to Windows and restart the system.

9)CHECKING THE UPS

Note: After installing the UPS it must be charged for 12 hours.

1) Start the UPS up.

2) Switch on the system.

3) When the system is running, switch off the main switch at the back of the cart.

4) The UPS will "BEEP" the orange lamp will lit up and the system will "shut down" similar to a normal shut down.

When the system's shut down is completed, switch on the main switch, the UPS will beep and the green light will lit up.

5) Restart the system.

10)Troubleshooting

Problem	Possible Cause	Action to Take
1) UPS not on 2) LED not light	On/Off/test/silence Button not pushed or push too short	Press the on/off/test/silence button more than 1 second
	Battery voltage less than 10V	Recharge the UPS at least 4 hours
	PCB Failure	Replace the PCB, call for service
	Load less than 20W at battery mode	Normal condition
3) UPS always at battery mode	Power cord lose	Re-plug the power cord
	AC Fuse burn out	Replace the AC fuse
	Line voltage too high, too low or black out	Normal condition
	PCB failure	Replace PCB, call for service
4) Back up time too short	Battery not fully charged	Recharge the UPS at least 4 hours
	PCB failure	Replace PCB, call for service
4) Buzzer continuous Beeping	Overload	Remove the non-critical loads
5) Red Led light	Battery Failure	Replace battery, call for service

11)Installation Check List

STEP No.	Step Description	FAIL/PASS
3	Procedure	
4	Setting the I/O card	
5	UPS Connection	
6	Bios Setup	
7	UPS Setup	
8	Modem Setup	
9	Checking the UPS	

	Name	Signature	Date:
Preformed by:			
Approved by:			

Fig. No. 1

TS-2000 BLOCK DIAGRAM 230V AC

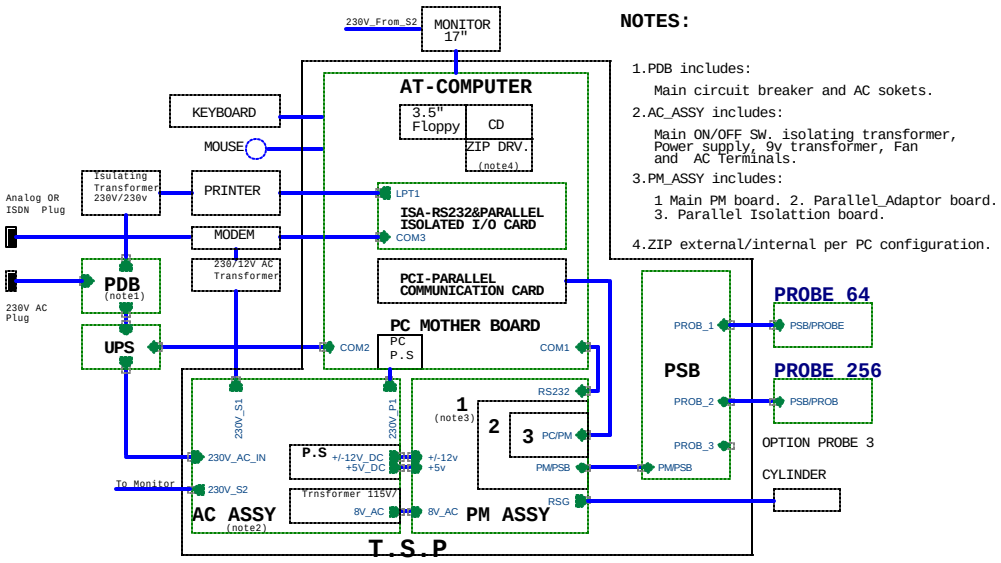


Fig. No. 2

TS-2000 BLOCK DIAGRAM 115V AC

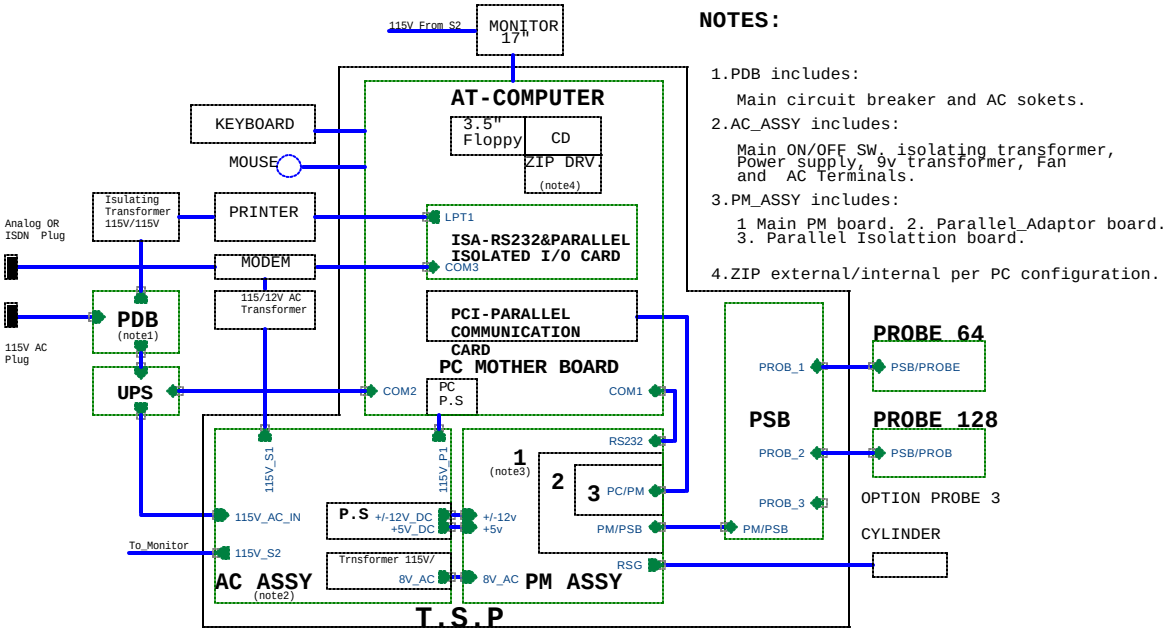


Fig. No. 3

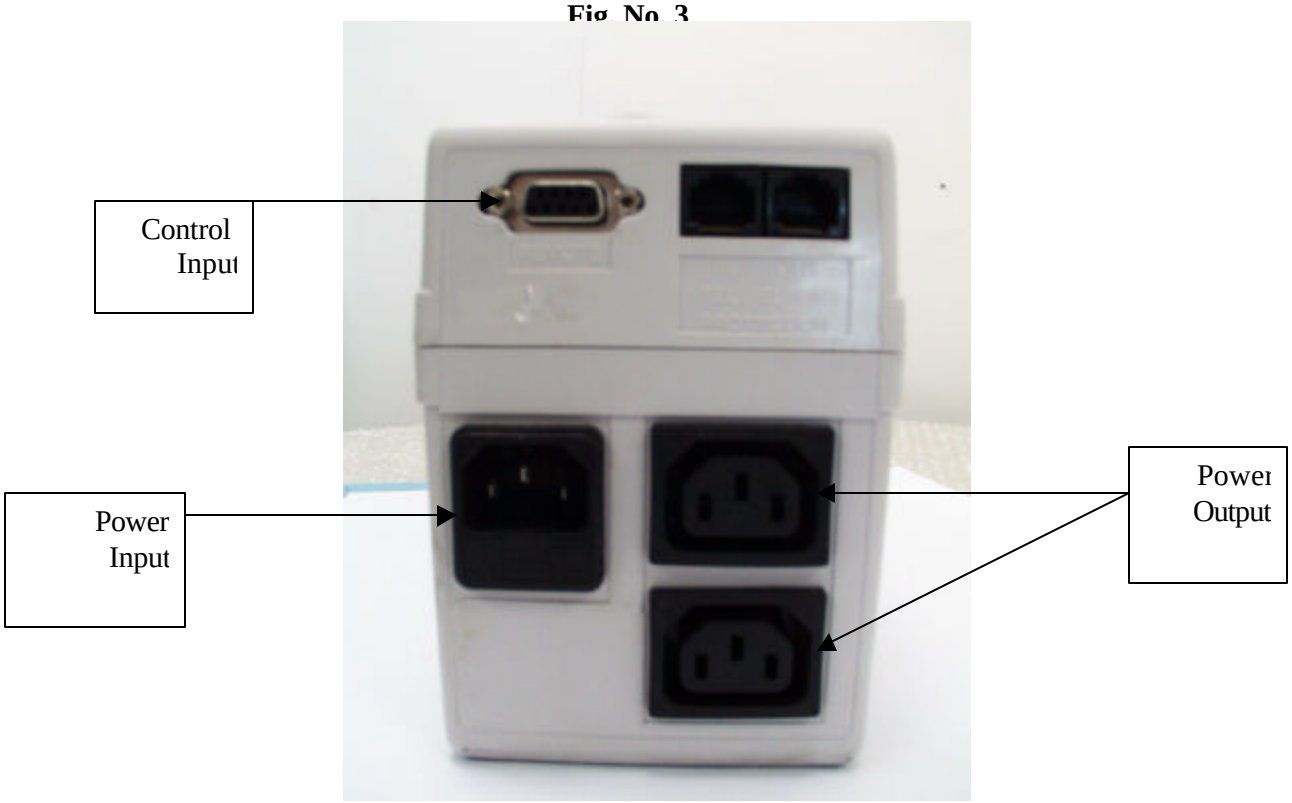


Fig. No. 5

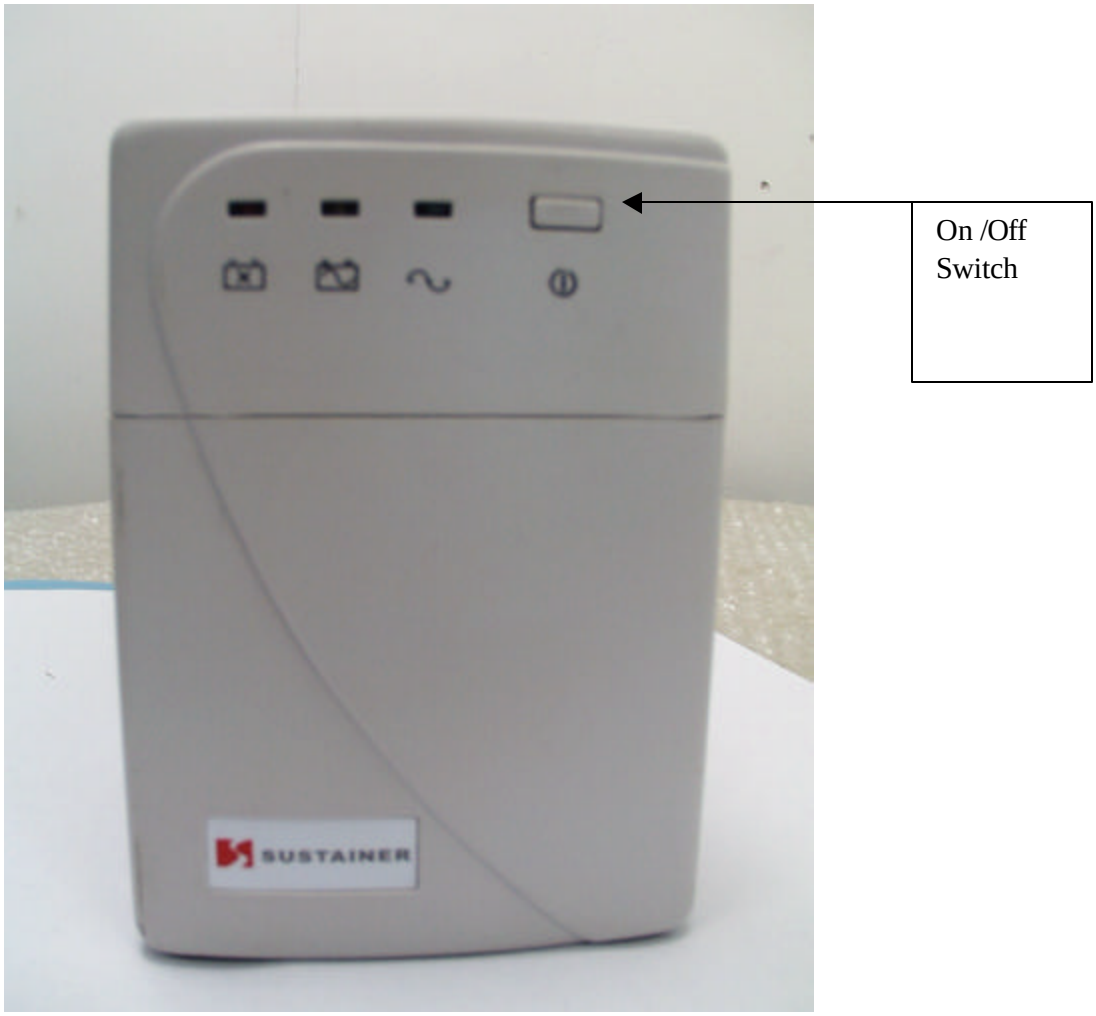


Fig. No. 6

Fig. No. 7

Fig. No. 8

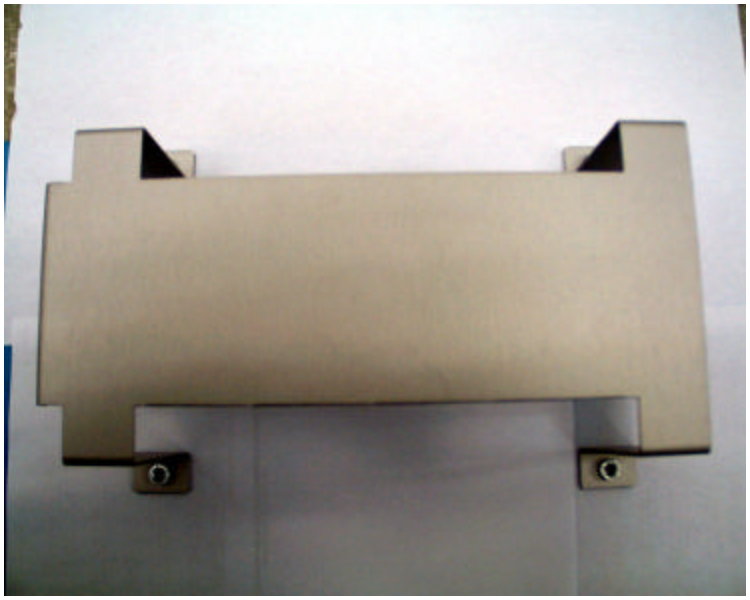


Fig. No. 9

Fig. No. 10

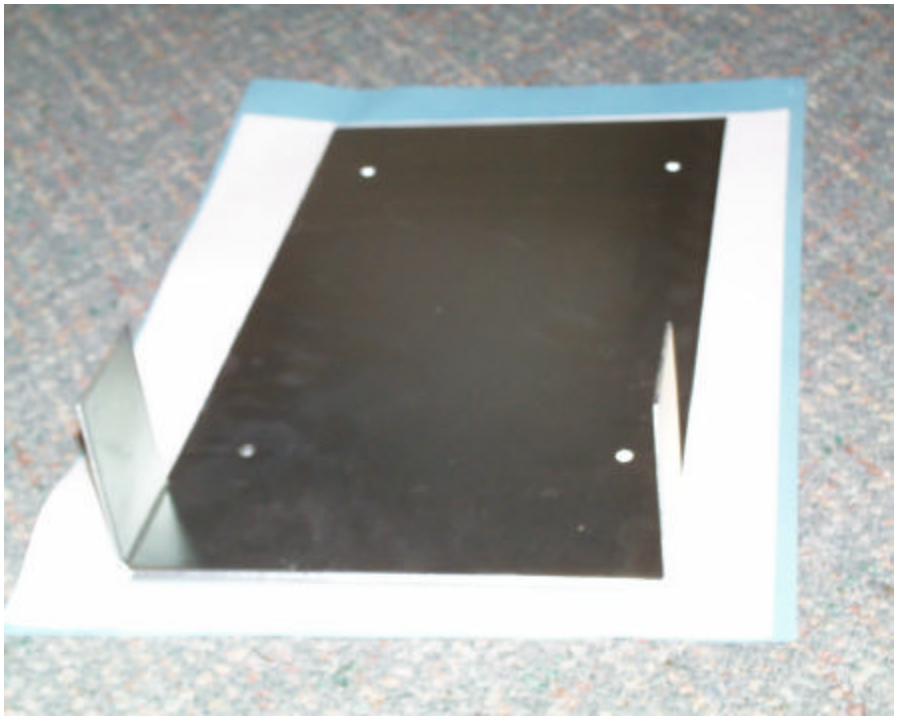


Fig. No. 11

Fig. No. 12

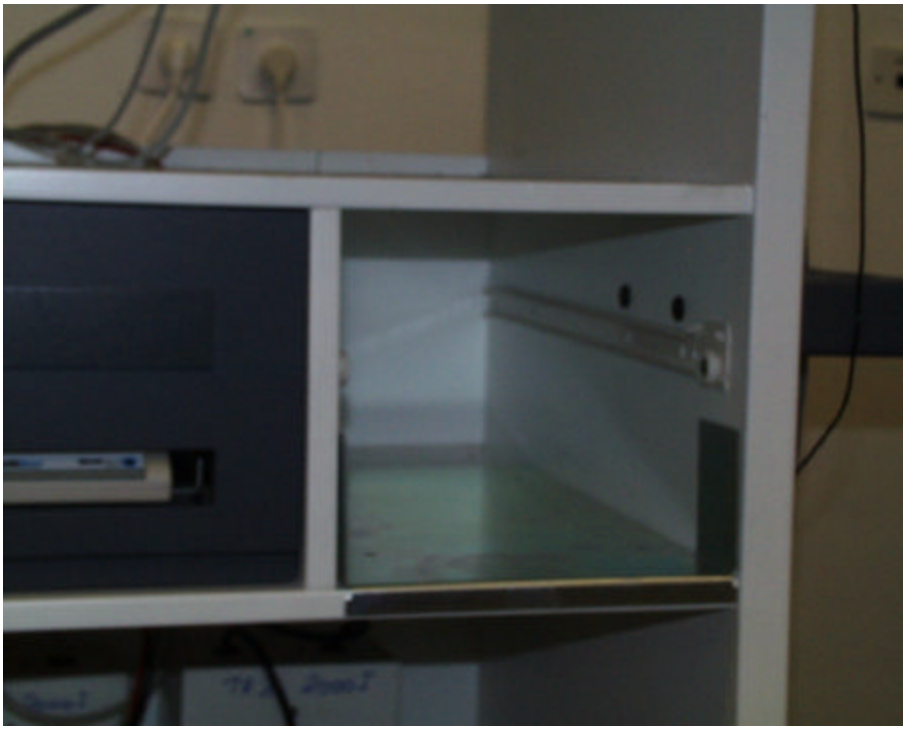
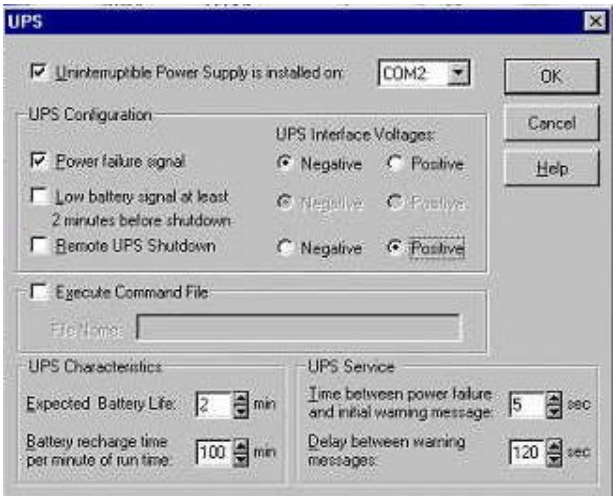


Fig. No. 13

Fig. 14

Fig. No. 15


UPS
Uninterruptible Power Supply is installed on:
COM2
OK
Cancel
Help
UPS Configuration
UPS Interface Voltages:
Power failure signal
Negative
Positive
Low battery signal at least 2 minutes before shutdown
Negative
Positive
Remote UPS Shutdown
Negative
Positive
Execute Command File
File Name:
UPS Characteristics
Expected Battery Life:
2
min
Battery recharge time per minute of run time:
100
min
UPS Service
Time between power failure and initial warning message:
5
sec
Delay between warning messages:
120
sec